Draft Strategy for Developing TMDLs

REGIONAL COUNCIL ATTACHMENT #4.3.2
Thursday, Feb. 6, 2003

REPORT

DATE: February 6, 2003

TO: Regional Council

FROM: Daniel E. Griset, Sr. Planner, (213) 236-1895, griset@scag.ca.gov

SUBJECT: Draft Strategy for Developing TMDLs and Attaining Water Quality Standards in the Los Angeles Region

EXECUTIVE DIRECTOR'S APPROVAL:

RECOMMENDED ACTION:

The Regional Council approves the draft comments reviewed and recommended by the Energy and Environment Committee with respect to the Draft Strategy for Developing TMDLs and Attaining Water Quality Standards in the Los Angeles Region submitted by USEPA and the Los Angeles Regional Water Quality Control Board.

BACKGROUND:

During the past two years the Regional Board has been responding to a 1999 federal consent decree that mandated the adoption of pollution control plans for Los Angeles and Ventura Counties. Called Total Maximum Daily Loads (TMDLs), these plans are required by the court to eliminate water quality impairments listed in the State's 303(d) listing of impaired water bodies over a period of 13 years. The court organized these impairments into 92 "analytical units", defined by various reaches or sections of local rivers, creeks, estuaries and ocean. Each of these identified impairments was scheduled in the consent decree to be addressed by a TMDL. Each TMDL, after being developed technically by the Regional Board staff, was then to be considered by the Regional Board for adoption and, in most cases, inclusion in the Los Angeles Region's Basin Plan. This process of technical work and plan adoption contemplated a 12 year adoption schedule with each TMDL taking considered in serial fashion.

As the Board has undertaken this work public concerns about this planning approach have been raised by a growing number of affected parties. Various public entities have contested current TMDL actions because the pollutants of concern identified for an action plan in a current year may require modification later when still other pollutants are scheduled for later TMDL action. For example, the interrelationship of treatment strategies for chloride and phosphorus suggests the need for a coordinated approach to developing pollution control measures (TMDLs) in a comprehensive process, not a piecemeal, serial process. Without a more comprehensive approach to pollution control planning there is a high likelihood that projects built in the early years will have to undergo expensive modification in order to accommodate other pollutants identified by the court for action in later years.

REPORT

Widespread public concern, including concerns expressed by SCAG, about the likely consequences of the current process have resulted in the recently released draft strategy in which USEPA and the Regional Board are suggesting new approaches to the TMDL process as well as the setting of water quality standards. Ultimately any new approaches in these critical areas will require the consent of the parties to the federal lawsuit.

Please review the attached draft comments prepared by staff, as well as the proposed EPA/Regional Board strategy document.

FISCAL IMPACT:

Expenses associated with this effort are currently supported with funding from the Caltrans Environmental Program in work element 03-190.

#80840

DRAFT COMMENTS BY SCAG
ON
PROPOSED TMDL/WATER QUALITY STANDARDS

Draft SCAG Comments on the

Proposed Strategy for Developing TMDLs and Attaining Water Quality Standards in the Los Angeles Region

Prepared for Consideration by the Water Policy Task Force, Energy and Environment Committee, and the Regional Council

Introduction

A draft of the Strategy was issued by the LA Regional Water Quality Control Board (LA RWQCB) and the US Environmental Protection Agency Region IX (USEPA IX) office on December 12, 2002. It's stated objectives are to improve efficiency in the development of TMDLs, to ensure that "in most cases" TMDLs are developed and approved in time to meet the federal consent decree. The work is organized on a watershed basis, which means that the original schedule laid out after the federal consent decree has been adjusted to combine TMDLs by watershed. There is also the intent of reviewing some Water Quality Standards (WQS), which have been controversial in the LA region, such as REC-1 and the use of Site-Specific Objectives (SSO). An important component of the new approach by the regulatory agencies is the opportunity for increased stakeholder involvement in the TMDL process, with some clarification on the various avenues for such involvement.

Comments

1. One of the key premises of the new strategy is that it is comprehensive. Although the new strategy is a welcome improvement over the previous approach, the discussion of how the TMDLs are going to be implemented in terms of stakeholder participation in the planning process, in pilot testing of BMPs and other facilities, in distribution of information from one stakeholder to another (e.g. from city to city) and in other ways is under-developed in the strategy.
2. Implementation of a TMDL seems to mean two different things. To the LA RWQCB staff, it appears implementation refers to Basin Plan modifications, NPDES permits and the establishment of studies to verify any issues that were not resolved during the TMDL process, as well as compliance monitoring or monitoring for these studies. To most stakeholders, the key issue when they consider implementation is capital expenditures for BMPs and other facilities, and in particular the timing of such expenditures. The proposed strategy does not address these "implementation" issues, or technology transfer, which can save millions of dollars per watershed.

3. The organization at the watershed scale appears to be a useful approach, but there are concerns with regards to how a much larger stakeholder group will be able to interact in a meaningful way with the RWQCB staff. There is very little discussion as to the complications that might result from trying to address too many pollutants at any given time. In addition, since water quality (WQ) data may not be available for all pollutants at the same time, it might be that it is not really feasible to generate all the TMDLs associated with a particular watershed at the same time.

4. The strategy indicates that "in the case when subsequent water quality data and reviews demonstrates that the water body is no longer impaired", the need to perform a TMDL will be eliminated. This of course is a rational statement. However, there has been lack of transparency in the review process by the LA RWQCB, and even mention of disagreement in positions between the LA RWQCB and the State Water Resources Control Board (SWRCB). It would certainly be useful to have more clarification on this issue (e.g. what data will be used, what are the criteria used in the review, are these criteria consistent between LA RWQCB, SWRCB and USEPA Region IX, when will a decision be made, will the LA RWQCB actually review new data every three years as required by the 1990 Clean Water Act Amendments).

5. There is a note in the draft strategy with regards to "if the SWRCB ultimately incorporates the strategy as part of the Continuing Planning Process", which hints at the possibility that the SWRCB has not been part of the process to develop this strategy. This is confusing to the stakeholders, since it means that this new approach might be turned down by the SWRCB. Shouldn't LA RWQCB and USEPA IX be working together with SWRCB in preparation of this draft?

6. Although Section 3.1 indicates that the main goal of the strategy is to increase the efficiency of the TMDL process, there is little discussion on how the process is going to be streamlined. Although one could infer that "bundling" TMDLs by watershed is seen as a more efficient process, this still has to be tested, since there are many potential issues. Sources will be different, relative magnitude of point source and non-point source will be different, quality of observed data is likely to be different, modeling frameworks might be different, etc. There is optimism that "many implementation measures will likely serve to reduce multiple pollutants". This is possible, but we think a more conservative approach could be expressed here that is closer to reality (e.g., "some implementation measures might reduce more than one pollutant").

7. The statements in Section 3.2 and 4.2 are encouraging with regards to a more frequent review of WQS. We trust that it will not just be the immediate WQS issues, but that the LA RWQCB will keep an open door to considering other WQS issues that may come up in the next few years. It certainly makes sense to review WQS before the TMDL process begins, since it could have implications for listing. It has also been confusing for stakeholders to have lack of transparency with regards to WQS modifications while the TMDL process is on-going.

8. With regards to permitting and implementation plans (Section 4.3), it is unclear how the LA RWQCB staff plans to distribute Waste Load Allocations (WLA) and Load Allocations (LA) among the various stakeholders. The process needs to be more transparent, and consideration of cost-effectiveness should be explicit. We all seek improved water quality, but this should come at the least cost possible so that limited funds can be available for other very necessary programs for the stakeholders (e.g., public safety, education and health care). There is no discussion of such balancing of resources within the strategy document. The flexibility in terms of the timing of implementation measures is welcomed, but there should be some guidelines so that stakeholders can have more certainty in their planning process. The RWQCB and USEPA are reminded that funding for implementation measures requires significant effort and time, and thus there is a need to discuss an overall implementation program that comprehensively looks at investment in water quality improvements over the next decade.

9. Section 6.0 addresses mostly the role of stakeholder groups in the development of the TMDL. While we see the various opportunities for stakeholder engagement as a welcome step, we feel that there is a need to address the steps beyond the development of the TMDLs. Who is going to organize the various stakeholder groups so that the Load and Waste Load Allocations are distributed equitably? How will implementation of pollution control measures be done cost-effectively, bringing multiple benefits to impacted communities? How are funds going to be raised to assist local agencies with the implementation of needed infrastructure? Who is going to coordinate technology transfer among various entities in order to reduce site-by-site learning curve expenses? How is the public at large going to be informed about the achievements that are made?

Based on our review of the "Strategy for Developing TMDLs and Attaining Water Quality Standards in the Los Angeles Region", we believe that a proactive organization of the interested parties to address the next steps in the TMDL process is in order.

Proposal for a Partnership to Improve Water Quality

In our view, the proposed "Strategy for Developing TMDLs and Attaining Water Quality Standards in the Los Angeles Region" addresses the reorganization of TMDL development by watershed, the more active review of Water Quality Standards, and the participation of stakeholders in the development of the TMDL, but it does not address another key issue: the tasks of organizing and empowering local agencies to develop the implementation of cost-effective control measures and obtaining funding for these water quality improvements. Thus, although it sets the targets for improving water quality in the Los Angeles area, it will not by itself produce the actions needed to achieve those targets. In our view, implementation goes beyond setting Load and Waste Load Allocations or addressing uncertainties in the TMDL process with further studies. It goes

to the crux of the matter, which is having an organized approach for managing taxpayer funds in a manner which results in continued improvement in water quality. We propose a Partnership for Sustainable Water Quality Improvement to organize pilot testing, information diffusion, implementation planning and fundraising activities.

The Sustainable Water Quality Improvement Partnership (SWQI Partnership) is a proactive LA Basin collaboration of local governmental entities and other stakeholders seeking to implement effective, coordinated pollution control measures in our watersheds and to achieve continuing compliance with the Clean Water Act and state law.

The founding entities of the Partnership would include the City of Los Angeles, the County of Los Angeles, the Los Angeles County Sanitation Districts, CalTrans, and the Southern California Association of Governments, collectively referred to herein as the Agencies. The Agencies are willing to fully collaborate with the Los Angeles Regional Water Quality Control Board (RWQCB), State Water Resources Control Board (SWRCB), and U.S. EPA Region IX to achieve a shared goal of sustainable water quality improvement.

The SWQI Partnership would help coordinate water quality efforts in Los Angeles County, and proposes a cooperative framework for environmental actions that will foster the participation and collaboration needed to implement pollution management plans and promptly bring real and lasting improvements in water quality. To ensure that these water quality benefits are sustainable for many generations to come, the Partnership would help develop an investment plan for implementing watershed-based pollution prevention and control projects that cost-effectively optimize environmental benefits.

The Partnership is proposed as a water quality management process in which the Agencies and other participating local government entities develop regional/watershed-wide implementation plans and projects required by TMDLs to protect the beneficial uses and water quality objectives established by the state in conjunction with USEPA. During this planning process, participants will develop an investment strategy for funding the control measures and facilities needed for implementing these pollution control measures. Such a plan will prioritize watershed projects to ensure that resources flow towards those projects producing the most favorable environmental benefits.

The Agencies believe that regional investments in a comprehensive master plan will outperform uncoordinated site-by-site (or jurisdiction-by-jurisdiction) investments. Some of the advantages afforded by more comprehensive solutions might include the ability to construct larger water quality facilities that can be scaled to treat greater runoff volumes more cost-effectively. Geographically extended treatment systems, for example, can be designed to control a variety of pollution problems in one place, and integrated watershed facilities could produce real improvements in water quality that the taxpaying public can readily see and appreciate. A comprehensive approach would also be better able to coordinate natural, multiuse processes to address water quality and, ultimately, would more effectively support healthy watersheds.

Another advantage of comprehensive master planning is its inclusion of widespread stakeholder participation. Since each watershed has many governmental institutions, economic interests, community and public interest groups, regional problem solving brings parties together that can best identify and "own" water quality problems and their

solutions. These same parties are needed for mobilizing the interest and resources required for controlling pollution, removing water impairments, and creating healthy watersheds.

In short, this type of planning gives special attention to dispersed pollution problems; it is comprehensive; it is multi-purpose; it is action-oriented; it fosters cooperation; and it makes more productive use of public resources.

The Partnership will encourage active public participation by a wide variety of watershed stakeholders. The Partnership will invite federal, state and regional regulators, local governmental organizations, special districts, watershed dischargers, environmental organizations and other interested members of the public to participate in developing studies, policy and plans. The Partnership will mobilize the necessary financial and technical resources required for this unprecedented undertaking. This participation process will guide the Partnership's priorities and prevent duplication of effort within the watersheds.

The Partnership's work plan will focus on gathering the necessary information to prepare a large-scale integrated regional implementation plan. This will be done through pilot projects, cost-effectiveness analyses, synergistic implementation activities, scientific studies and resolving regulatory issues. The main goal is to develop a cost-effective roadmap for implementing basin-wide load reductions within the next three years. With a focus on implementation, the top priorities are:

- Identify cost-effective opportunities for early implementation of load reductions
- Conduct pilot tests of innovative treatment technologies and BMPs, whenever necessary, to ensure performance
- Develop a technology transfer program, to disseminate knowledge gained from the pilot studies to the SCAG member cities and other interested agencies

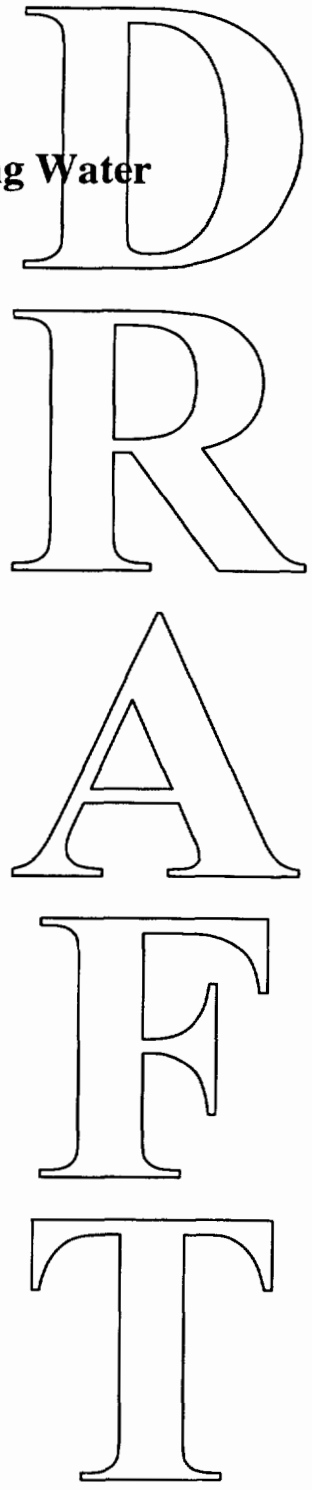
In addition, to develop a basin-wide Investment Plan, the Partnership will be required to:

- Complete watershed inventories and enhance basin-wide monitoring plans as needed
- Enhance models that link sources of pollution and observed water quality, comprehensively by watershed and for all the pollutants identified by the stakeholders
- Develop alternative implementation strategies
- Develop basin wide investment estimates, expected improvements in water quality, timelines for implementation, and identification of constraints; this is denominated the "Roadmap" to implement water quality improvements; the Roadmap is to be used as a guide by the Agencies, SCAG member cities and other interested parties.

We also see the need for developing an outreach program to inform the public about the SWQI Partnership's achievements with respect to water quality improvements.

USEPA / REGIONAL BOARD
TMDL/WATER QUALITY STANDARDS
STRATEGY PROPOSAL

DRAFT Strategy for Developing TMDLs and Attaining Water Quality Standards in the Los Angeles Region



California Regional Water Quality Control Board
State Water Resources Control Board
U.S. Environmental Protection Agency

Public Review Draft
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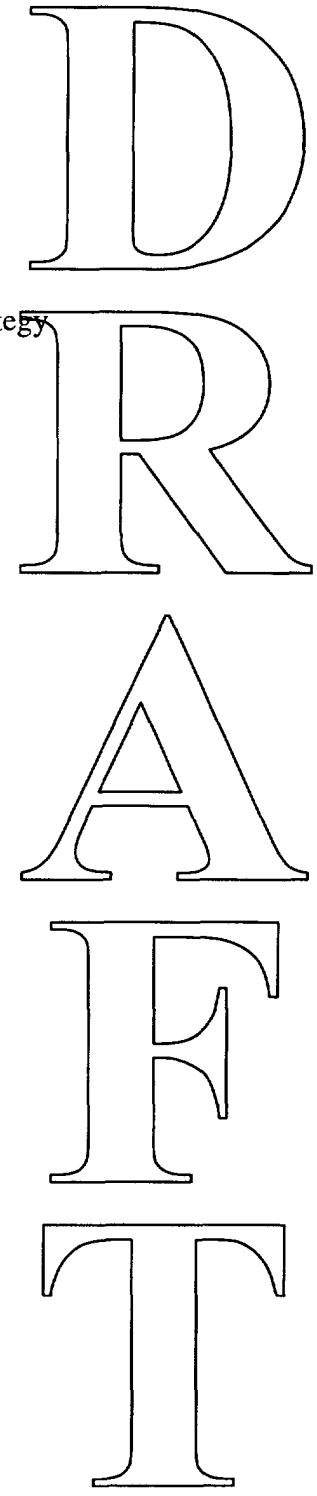

1.0 What Is Being Proposed?

The California Regional Water Quality Control Board (Regional Board), State Water Resources Control Board (State Board), and U.S. Environmental Protection Agency (EPA) share responsibilities for the development and implementation of various water quality protection programs in the Los Angeles Region, including total maximum daily loads (TMDLs), water quality standards (WQS), and NPDES discharge permitting. Given the large number of waterbodies that exceed standards (in excess of 160), TMDLs will be key to any strategy to restore water quality within the region. In addition, a federal consent decree requires USEPA to ensure that TMDLs are established for almost all of these waters (which have been grouped into 92 TMDL analytical units in the decree). The Regional Board and State Board staff (collectively referred to as the State), and EPA are proposing a comprehensive strategy that clarifies when and how TMDLs will be developed in the region during the next 10 years, and how TMDL work will be coordinated with WQS and permitting actions.

Active stakeholder participation will be vital to the success of this strategy, both in its formulation and its implementation. The State and EPA plan to discuss the proposed strategy in detail with interested stakeholders over the next 90 days, incorporate their ideas to help fine tune and improve the strategy, and complete a final strategy that will guide operation of these programs in the future. A final strategy will be presented to the Regional Board for review and consideration of a resolution requesting that the State Board incorporate the strategy into the State's Continuing Planning Process documents.

2.0 What Does This Strategy Address?

This strategy describes how total maximum daily loads (TMDLs) and associated revisions to water quality standards (WQS) will be developed over the next 10 years in the Los Angeles Region. While outlining a strategy, the approach will not be so rigid as to prevent the State and EPA form addressing other WQS issues as they evolve during the next 10 years. The strategy:

- Clarifies ongoing and planned future schedules for developing TMDLs and reviewing related WQSs
- Is organized at a watershed scale in order to increase the efficiency of TMDL development and provide clearer understanding of implementation actions needed to address multiple pollutants,
- Explains the analytical methods (e.g. modeling approaches) that will be used to develop TMDLs and review WQSs,
- Describes the respective roles of the Regional Board and EPA in developing TMDLs and WQSs,
- Identifies how stakeholders can become involved in development of TMDLs and associated reviews of WQSs, and

- Clarifies how TMDLs will be implemented through NPDES permits and other enforceable programs.

This strategy lays out a plan for developing TMDLs on a watershed basis. Table 1 summarizes the schedule for completing TMDLs in each watershed and identifies standards issues that will be considered during or prior to TMDL development. A fact sheet has been prepared for each watershed. The fact sheets list the Section 303(d) listed pollutants, the major point source dischargers and non-point sources, and the standards issues that have been identified to date, which warrant review prior to or during TMDL development, if any. In addition, the fact sheets summarize the technical approach, special studies that are underway in support of the TMDL, and the current status of stakeholder involvement.

The State and EPA intend to carry out the strategy and meet the schedules presented in this document. However, it may not be feasible or appropriate to meet these schedules if:

- State or federal budgets, policies, program priorities, or statutory/regulatory requirements prevent attainment of goals
- The Regional Board, State Board, or California Office of Administrative Law do not make timely decisions on TMDLs, WQS changes, or permits; or otherwise remand decisions for further staff work;
- Forces beyond the control of the State or EPA make it impossible to meet schedules.

Other factors may eliminate the need to perform certain TMDLs as in the case when subsequent water quality data and reviews demonstrates that the water body is no longer impaired.

If the State ultimately incorporates the strategy as part of the Continuing Planning Process documents, the State would periodically review this strategy and make revisions if necessary.

3.0 Why is the Strategy Being Developed?

The Strategy is being developed to help clarify how TMDLs and WQS will be developed and implemented in the Los Angeles Region. Some interested agencies and stakeholder groups have expressed concern that the State and EPA have not clearly explained how these programs will operate together in the future. Furthermore, the strategy development process provides an opportunity to decide on a regional scale with stakeholder involvement how these programs will be implemented and then to focus on completion of specific actions and decisions at a watershed scale.

3.1 Why are TMDLs Addressed in the Strategy?

In 1996 and 1998, the Regional Board identified more than 160 water body segments that are polluted by various constituents and therefore exceed their water quality standards. In 1998, a coalition of environmental advocacy groups sued EPA for failure to ensure timely development of pollutant control plans called TMDLs for each polluted water in the Los Angeles Region. The federal Clean Water Act requires completion of TMDLs for all pollutant-impaired waters. The litigation resulted in a consent decree signed on March 22, 1999 (Heal the Bay, et al. v. Browner, Case No. 98-4825 SBA). The consent decree establishes a schedule for completing TMDLs for all the polluted waters within 13 years.

As a party to the consent decree, EPA must ensure that TMDLs for all impaired waters and the pollutants of concern are either established by EPA or submitted by the State and approved by EPA in accordance with a schedule included in the consent decree. EPA and the Regional Board are working cooperatively to develop TMDLs, with EPA providing substantial funding, staff support, and contract support services. Since the signing of the consent decree, the Regional Board has developed several TMDLs. However, due to delays at the Regional Board and State Board, which prevented full state-adoption in time to meet the consent decree deadline, EPA has had to formally establish three TMDLs in the past and will probably have to establish at least two others in the near future in order to meet the consent decree deadlines. [1] The State intends to increase the efficiency of its TMDL efforts, with the goal of fully adopting TMDLs prior to the deadline for EPA establishment. The State, EPA, and some stakeholder groups are interested in clarifying TMDL development responsibilities and schedules. in order to ensure timely completion of TMDLs as required to meet the consent decree schedules.

3.2 Why are Water Quality Standards Addressed in the Strategy?

TMDLs and NPDES permits are both designed to identify actions and controls needed to attain water quality standards under the Clean Water Act. The State has developed and periodically updated water quality standards over the last 25 years, sometimes at a statewide or regional scale and sometimes for individual water bodies. The Regional Board regularly reviews its WQS through the Triennial Review process and actively

[1] EPA established the Los Angeles River and Ballona Creek Trash TMDLs prior to State approval. However, EPA merely established TMDLs that had already been adopted by the Regional Board, sans the implementation plans. EPA's TMDLs were subsequently superceded when they approved the State's trash TMDLs in August of 2002. EPA established the Calleguas Creek Chloride TMDL based upon the Technical Support Document and Draft Staff report prepared by Regional Board Staff. EPA is expected to establish the Malibu Creek pathogen and nutrient TMDLs in March of 2003, in order to meet the consent decree. Regional Board staff are working closely with USEPA in this effort.

solicits input from the public in identifying priorities for WQS reviews and revisions. The most recent Triennial Review was conducted in 2001, and may of the high-priority issues have already been addressed. Recently, the Regional Board has adopted or considered adopting several revisions to water quality standards to reflect more recent scientific data. In addition, several groups have urged the Regional Board to conduct a more comprehensive review of all the WQS contained in the Basin Plan along with associated implementation procedures.

The development of water quality standards identify the level of pollutant control necessary to support beneficial uses. TMDLs must be adopted for water bodies that are impaired by pollutants and are unable to consistently attain WQS. In this sense, TMDLs and WQS operate together: WQS provide a foundation for determining whether a TMDL is necessary and the TMDL is a structured mechanism for achieving WQWS. Increased protection of water quality can be costly, and stakeholders have expressed a range of views about how much pollutant reduction is needed and whether the associated costs are reasonable. This strategy addresses these concerns by identifying specific WQS that will be reviewed and potentially revised for specific water bodies and pollutants, defining TMDL development plans, and clarifying how TMDLs will be implemented through the NPDES permitting, Waste Discharge Requirements and other enforceable programs.

3.3 Why Are NPDES Permits Addressed in the Strategy?

Since California received authorization to implement the NPDES discharge permit program in the 1970's, California has developed several generations of discharge permits for wastewater treatment plants, industrial discharges, and a variety of stormwater discharges as required by the federal Clean Water Act. The Regional Board is the designated permitting agency responsible for issuing these permits in the Los Angeles Region.

Although permits are not a primary focus of this strategy, some dischargers have raised questions about how TMDLs will be implemented through the permit process. The State and EPA believe it is important to explain the relationship between TMDL development and permit re-issuance in Los Angeles in light of these concerns.

3.4 Why are TMDLs as Single Permitting Actions Addressed in this Strategy

In most cases, TMDLs have been developed as Basin Plan amendments and implemented through permits. The State is authorized to permit both point sources (through NPDES permits) and most non-point source discharges (through Waste Discharge Requirements). However, in some cases, TMDLs may be implemented directly through a single permitting action, without a Basin Plan amendment.

4.0 What is the Overall Strategy?

The goals of the strategy are to increase the efficiency and to enlist the cooperation of stakeholders during TMDL development and implementation. At the core of the strategy is a 10-year master TMDL development schedule. The schedule was designed to develop TMDLs on a watershed basis, to the extent possible. In addition, the development of a long-term TMDL schedule allows the agencies and stakeholders to better plan their activities.

The strategy goals will be achieved by the following means:

- Meet the consent decree deadlines for completing TMDLs
- Address TMDLs simultaneously, on a watershed basis, to the extent possible
- Identify water quality standards issues that may impact TMDL numeric targets and address them before completing the TMDL
- Consider permitting cycles when developing TMDLs implementation schedules
- Explore other enforceable programs and implementation measures, where there is a potential for increased efficiency.

4.1 Scheduling of TMDLs

The strategy schedules are designed to ensure that the consent decree deadlines are met. In most cases, TMDLs will be adopted by the State in time to meet consent decree schedules. The State and EPA believe it is preferable for the State to adopt, and EPA to approve these TMDLs instead of having EPA establish TMDLs in order to meet consent decree schedules. The benefits of this approach are that (1) the State's TMDLs will be accompanied by detailed implementation provisions that will guide revision of NPDES permits and implementation of other actions needed to attain TMDLs, and (2) confusing and wasteful duplication of effort in developing TMDLs in consultation with the public is avoided. However, the schedule does provide for EPA establishment of a few TMDLs in order to meet consent decree schedules. In these cases, EPA would establish TMDLs for a limited number of pollutants in accordance with the consent decree schedule, and the State would later adopt these TMDLs and associated implementation provisions

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In most cases, the TMDL and WQS work is framed at a watershed scale with the intent (where feasible) of completing most or all TMDLs simultaneously. This approach is used especially where the pollutants have common sources or where common implementation measures apply. Bundling will provide a more holistic approach to designing implementation measures and will address the concern that it is difficult to effectively plan controls when TMDL development is spread over many years. Many implementation measures will likely serve to reduce multiple pollutants. Optimum measures can be designed by considering the removal efficiency of all pollutants that threaten water quality within the watershed. Bundling will also serve to reduce staff's administrative workload and reduce the overall cost of developing and adopting TMDLs,

WQS, and associated Basin Plan Amendments. Ideally, WQS work would be planned and performed in advance of TMDLs. This may not be possible, however, for TMDLs due in the near term.

4.2 Water Quality Standards Issues

Water quality standards are comprised of designated beneficial uses (e.g. fishing, swimming, aquatic life habitat, and drinking water source), numeric and narrative objectives that address specific pollutants and stressors, and antidegradation policies. WQS are often supplemented by detailed implementation procedures that explain how individual components of WQS will be interpreted and implemented through TMDLs, permits, or other actions. The State reviews WQS every 3 years as part of the triennial review process, and modifies or updates specific WQS components where needed as resources allow.

The WQS are contained in the Regional Board's Basin Plan, the California Toxics Rule, the Ocean Plan, and the Thermal Plan. Implementation procedures are described in the Basin Plan, State Implementation Plan, and the EPA's Technical Support Document. The Regional Board's WQS strategy is to systematically review and, where necessary, update WQS elements of the Basin Plan to address the WQS issues most in need of revision. The Regional Board works closely with interested stakeholders to review and revise WQSs.

This strategy identifies specific locations where designated use modifications will be evaluated. It is usually neither legally feasible nor necessary to remove currently designated uses if the concern is those uses only exist to a limited extent (e.g., a less diverse aquatic ecosystem in channelized streams). In those cases it may be feasible to subclassify the designated uses to more accurately characterize the potential designated use. It is feasible to remove designated uses if the use does not exist at all and has not existed since November 1975. The Regional Board Staff is proposing to remove some uses in this category for specific reaches of some rivers and streams; however, the practical effect of these changes on water quality management decisions may be minor because the designated uses and associated objectives in adjacent or downstream river segments will not be changed. In cases where designated uses are modified or subclassified, it may be necessary to recalculate the associated numeric objectives for individual pollutants at levels sufficient to attain the revised uses.

The strategy also identifies some locations where the applicable numeric water quality objectives[2] will be reviewed and potentially revised without revising the use designations. Objectives may be modified in two circumstances:

[2] The term water quality objective is used in California's Porter-Cologne Water Quality control act, and generally, refers to that portion of WQS corresponding to the level of protection necessary for a particular beneficial use.

1. Site specific water quality objectives are recalculated based on standard criteria methods, taking into account local chemical and physical conditions (e.g., recalculating ammonia through the site-specific water effect ratio method).
2. Site specific objectives are recalculated based on revised policy decisions concerning the level of protection to be provided designated uses under special circumstances (e.g., high flow situations in channelized streams .

The Regional Board staff intends to seek policy direction from the Regional Board with respect to WQS revisions priorities and the potential revision of use protection thresholds. The Regional Board has the discretion to decide whether and to what extent it supports WQS revisions, and State and EPA staff believe it will be most efficient to seek policy direction prior to investing substantial resources in analytical work to support WQS revisions.

TMDLs must be calculated to meet applicable existing water quality standards. Therefore it is important that standards be updated to reflect the most recent peer-reviewed, scientific data before the TMDL is adopted. The Regional Board recently updated its bacteria and ammonia water quality objectives prior to the Santa Monica Bay Pathogen and Calleguas Creek Nutrient TMDLs for this reason. Other ongoing standards reviews include the following

- Regional Board staff are currently reviewing studies being performed on behalf of the Sanitation Districts of Los Angeles County to support a SSO based on local water effects ratios for ammonia toxicity. Should these studies successfully support alternative site-specific ammonia objectives, staff will prepare a draft Basin Plan Amendment for the Regional Board's consideration.

- Competing beneficial uses must be balanced, as in the case when bacteria resulting from wildlife (WILD) causes an exceedance of contact recreation standards (REC-1). To address this issue Regional Board staff propose to incorporate a "natural source exclusion" approach as part of the implementation provisions for the recently adopted bacteria objective and in the Santa Monica Bay Wet-Weather Pathogen TMDL and Basin Plan Amendment.

- Draft Ballona Creek REC-1 Beneficial Use De-designation. Staff plans to release a draft UAA in January 2003 to consider de-designating the REC-1 Beneficial Use in portions of Ballona Creek, where access is restricted and water depths average only a few inches. Depending on the success of this effort, staff may evaluate the REC-1 Beneficial Uses in other restricted concrete-lined channels.

See the attached fact sheets for additional watershed specific information.

4.3 Permitting and Implementation Plans

The Regional Board is responsible for developing and issuing NPDES permits for discharges from many wastewater treatment plants, industrial facilities, stormwater collection systems, and other point source facilities. WQS and TMDL decisions will include guidelines describing how they are to be implemented through NPDES permits. TMDLs, in particular, will include specific numeric waste load allocations (WLA) for discharges subject to NPDES permits. The level of detail in WLAs will vary depending upon the types of discharges and pollutants involved. For example, individual wastewater treatment plants will generally receive individual WLAs whereas individual stormwater outfalls most likely will be grouped under one or more general WLAs assigned to a specific stormwater permit holder.

As TMDLs are adopted as Basin Plan amendments, subsequent revisions to NPDES permits will implement the WLAs established in applicable TMDLs. However, when a TMDL can be achieved through a single permitting action, a Basin Plan amendment may not be required. (See TMDLs as Single Permitting Actions). Specific changes in existing or revised permits will be necessary in order to ensure that the permits are consistent with applicable WLAs, as required by federal regulations at 40 CFR 122.44.

Ideally, TMDLs would be completed before NPDES permits were issued in a particular watershed. But this is often not feasible due to conflicting work plan commitments and consent decree deadlines. To date, many TMDLs have included additional studies during the early years of implementation, before actual reductions are required. In these situations, it is not necessary for discharge permits and TMDL development to coincide. However, the Regional Board will consider the permitting schedules when designing the TMDL implementation plans to ensure that delays in permitting do not cause unscheduled delays in TMDL implementation. Depending on timing, permits may be re-opened before expiration to incorporate TMDL allocations.

The manner in which the Regional Board will ensure that the effluent limitations in NPDES permits are consistent with WLAs will vary depending upon the characteristics of the discharge and pollutants involved. For traditional point source discharges (e.g. wastewater plant effluent), numeric effluent limitations will be developed that are consistent with applicable WLAs. For other point source discharges including stormwater discharges, numeric effluent limitations or narrative effluent limitations based on best management approaches will be used depending upon the specific situation. In order to apply narrative effluent limitations to interpret WLAs, it will be necessary to demonstrate how BMPs or other control actions or practices will be sufficient to result in full attainment of the applicable WLAs. No point source discharge may cause or contribute to violations of applicable WQS.

The State and EPA intend to work closely with interested stakeholders to clarify how specific permitting issues should be addressed in individual watersheds. The TMDL and implementation plan development process in each watershed should provide a sufficient opportunity to discuss issues about the relationship between TMDLs and permit provisions. In some cases, the strategy provides that the State will expect permit holders to assist in collecting monitoring data needed to complete TMDLs. Based on the productive cooperative projects supporting several TMDLs that are currently being developed, the State and EPA expect that most permittees will voluntarily agree to assist with monitoring; however, it may be necessary to order some monitoring pursuant to Section 13267.

In general, the State and EPA believe a cooperative approach to monitoring and analysis will assist in developing high quality WQS, TMDL, and permitting decisions that address discharger and other stakeholder interests. To help highlight the connection between WQS, TMDLs and permitting in individual watersheds, the watershed fact sheets will identify major permits.

4.4 TMDLs as Single Permitting Actions

When a TMDL can be implemented through a single permitting action, a Basin Plan amendment may not be required. The Draft McGrath Beach TMDL due to be released for public comment in the near future, is the region's first example of a single permitting action, that will not require a Basin Plan amendment. See attached fact sheet for more information. In addition, Regional Board staff recently released a Basin Plan amendment to allow compliance schedules in NPDES permits. The compliance schedule tool would enhance the single permit as a means of implementing TMDLs in a more efficient manner.

Draft TMDL Development Schedule

Watershed	Nutrients	Bacteria	Metals	Organics	Other	Water Quality Standards reviews
Malibu Creek	03	03	04		benthics, trash 04	Natural Sources Exclusion Update of ammonia objective,
San Gabriel River	04	04	04	04	trash (04)	High flow exclusion Update of Ammonia objective WER for Ammonia REC-1 in concrete channels
Los Angeles River	03	04	04	04		High flow exclusion Update of Ammonia objective REC-1 in some concrete channels
Santa Monica Bay	NL	03	05 unless delisted	08		
Ballona/Marina dRey	NL	03	03	03		UAA for REC-1 in Ballona Creek upstream of estuary High-Flow Exclusion
Santa Clara River	05	05	NL	05	chloride 03	Update of ammonia objective

Calleguas Creek	03	NL	06	06	salts 06 toxicity 06	Update of ammonia objective
Dominguez Chan.	10	10	07	07	07	High Flow Exclusion
LA Harbor/Estuary	NL	07	07	07	07	
Ventura Coastal (McGrath)	08	0(03)	08	08		
Ventura River 1	09	09	09	09		
Los Cerritos Channel/Alamitos Bay	10-	10	10	10	10 legacy pesticides, PAHs	
LA River Lakes	11	11	11	11		
S. Gabriel R. Lakes	12	12	12	12	Trash 12	

NL = not listed

6.0 How Can Stakeholders Become Involved?

Some stakeholder groups have expressed interest in assuming responsibility for completing substantial portions of the analytical work needed to support TMDL and WQS decisions. The State and EPA believe that stakeholder-led projects may be able to to support more sophisticated analytical work than the State and EPA in some watersheds. This section describes the State's and EPA's expectations of these projects. Our intention in describing these expectations is to ensure that work plans and schedules for stakeholder-led TMDL and WQS projects are clearly decided in advance in ~~order to~~ enhance the chances that the work is used productively to improve decisions ~~and to avoid~~ misunderstandings later in the process.

The intensity of planned stakeholder involvement will vary from watershed to watershed depending upon the complexity of the issues involved and level of stakeholder interest in WQS, TMDL, and permitting issues in each watershed. At a minimum, the State and EPA will provide stakeholders opportunities to review and comment on each WQS, TMDL, and permit decision. In most cases, the State and EPA will host periodic meetings to inform interested stakeholders about WQS and TMDL development plans and progress, then provide formal opportunities to review and comment on draft decision documents. In watersheds where there is a high level of local interest in WQS and TMDL issues, more formal policy or technical advisory committees will be formed to provide opportunities for more intensive, structured discussion of WQS and/or TMDL development issues and approaches. The State and EPA's ability to convene and participate in highly intensive stakeholder processes may be limited due to staffing constraints and the demands of multiple projects that are underway at the same time. Finally, in some watersheds, local groups may take responsibility for completing studies and plans necessary to adopt WQS and/or TMDLs.

The individual watershed fact sheets in Appendix A describe the specific approaches to stakeholder involvement planned for that watershed. Stakeholder involvement approaches will generally include some combination of the following approaches, which are listed below in order of least to most involved.

1. Notice and comment. Stakeholders review and comment on draft documents ~~released~~ during the public notice period prior to State or Regional approval of WQS or TMDLs.
2. Periodic updates through watershed groups. Stakeholders are kept informed of WQS/TMDL development issues through local watershed groups or meetings convened by the State/EPA during the development process. In general, these updates would occur from 2-4 times during the development process.
3. Policy coordination through advisory groups. Policy advisory groups are convened to discuss and offer advice on WQS/TMDL policy issues and options (e.g., load and waste load allocation strategies and/or potential implementation measures and related costs.) In general, these advisory groups would convene from 3-6 times during the

development process, and may be convened in association with standing watershed groups if the existing groups are interested in serving this function.

4. Technical collaboration through advisory groups. Technical advisory groups are convened involving stakeholders with intense interests in the technical aspects of WQS or TMDL development. These groups would discuss and offer advice on technical approaches, collaborate in design and implementation of monitoring programs, and potentially collaborate in completing certain analytical products. In general, technical advisory groups would convene from 5-10 times during the development process. The State and EPA would generally convene these groups although participants in local watershed groups may participate if they are willing to focus on and contribute to the resolution of technical issues
5. Stakeholder-led WQS and TMDL Studies. Local stakeholder groups take formal responsibility for completing all or substantial amount of work needed to adopt WQS or TMDLs. State and/or EPA staff would be intensively involved in each of these efforts but the stakeholder group is responsible for project management and timely completion of products consistent with the schedules identified in this strategy. Any interested stakeholder would be afforded the opportunity to participate in this process from the outset.

Stakeholders involved in Levels 1 and 2 will have the opportunity to review draft documents and enter their comments into the administrative record. This level is the least resource intensive and is subject only to meeting deadlines for submitting comments.

Depending on the issues, Levels 3 and 4 may be equally resource intensive, but probably attract different skill sets. It is important that persons who represent organizations keep the decision-makers informed and are authorized to make decisions and commitments on behalf of the organization. Technical Advisory Groups should include recognized scientific experts that can make informed decisions regarding study designs, quality assurance/quality controls, etc. These experts need not include stakeholders, but should represent local expertise.

Policy Advisory Groups will need to include balanced participation. It is important to have representation from all affected parties including the environmental community and key users of the water (e.g., agriculture). This is especially important when important decisions are being made regarding the division of load allocations and waste load allocations and/or implementation measures.

6.1 How Will Stakeholder-Led Projects Be Arranged?

The State and EPA will support and participate in stakeholder-led WQS and/or TMDL work if specific, formal agreements are made between the group and the State. These agreements must articulate technical approaches, quality assurance procedures, peer review procedures, stakeholder involvement approaches, and project management details sufficient to ensure timely completion of high quality products. This formal approach to

endorsing WQS and/or TMDL work by stakeholder groups is necessary in order to ensure that (1) the work of stakeholder groups is useful in the final State/EPA decisions, (2) the groups have greater certainty that their work will be used by the State and EPA, and (3) TMDL consent decree schedules will be met.

Because it is important that the strategy provide accurate information about how TMDLs will be completed (particularly in the next few years), the State and EPA request that interested stakeholder organizations articulate their proposed plans to develop WQS and/or TMDLs during the comment period on this strategy. All interested organizations should submit a formal statement of intent to the Regional Board Executive Officer that specifically describes the WQS and/or TMDLs to be addressed and identifies the proposed lead and participating entities that will take responsibility for the work. Within 6 months after the statement of intent is submitted, the State and the stakeholder organization will need to enter into a memorandum of agreement that specifically articulates the scope of the work to be completed and methods to be used. The following section discusses the specific expectations of stakeholder-led WQS and TMDL efforts in greater detail.

If local stakeholder groups do not identify their interests in taking responsibility for all or part of WQS or TMDL work in a particular watershed during the comment period, the State and EPA will retain the lead for WQS and TMDL development. Following adoption of this strategy, stakeholder groups may propose to take lead on WQS and/or TMDL work by submitting a formal statement of intent to the Regional Board Executive Officer. The State and EPA expect that any future proposals to assume a lead role will be submitted at least 6 months after the Regional Board adopts this strategy or 30 months prior to the scheduled TMDL completion date contained in the Summary Table (for planning purposes assume that the TMDL will be completed at the Regional Board level in January of the specified year.) prior to the date identified in this strategy to initiate TMDL development in a particular watershed. This lead time is needed to ensure that an MOA can be negotiated between the stakeholder group and the State in time to allow timely development and completion of the WQS and/or TMDLs.

6.2 How Should Stakeholder-Led Projects Be Organized?

Stakeholder-led WQS and/or TMDL projects represent the most resource intensive stakeholder effort. In order for the State and EPA to endorse and rely upon these efforts to support timely completion of WQS and/or TMDL decisions, the State expects to enter formal agreements with the stakeholder group that confirm the specific project approach, schedules, and commitments. The following characteristics must be present in the project agreement:

1. Methods are Demonstrated to be Scientifically Rigorous and Objective:

    - Contractor Selection.

- Contractors to be selected by competitive bidding process;
- Contractors must be technically qualified and approved by the State and EPA

- Work plan is approved by both USEPA and the Regional Board in advance. The plan must include:
  - Study Objectives
  - Study Methodology
  - Analytical Methods (e.g., sampling protocol, analytical methods, chain of custody, statistical methods, modeling methods, etc.)
  - Provision for peer review of analytical methods prior to completion of final workplan
  - A Quality Assurance/Quality Control Plan is developed and approved by the Regional Board and USEPA
  - Final work products subject to State Board Peer Review process.

2. Work Meets Legal Requirements

- Complies with applicable federal TMDL development guidance and protocols
- Complies with applicable state TMDL development and protocols
- Consistent with other legal requirements (e.g., water rights, California Environmental Quality Act, California Coastal Act, Department of Fish and Game, Department of Fish and Wildlife, Army Corps of Engineers, local land use plans, etc.)
- Consistent with Consent Decree requirements and schedules.

3. Involves All Interested Parties

- Convenes broad-based stakeholder group, representing all viewpoints
- Conducts public outreach throughout project to inform public about project status and milestones
- Provides facilitated process with clear ground rules for discussion and decision making
- Includes regularly scheduled reporting to stakeholder community.

4. Involves Regional Board Participation

- Availability of Regional Board staff to participate is a pre-condition
- Specific mechanisms and time lines for Regional Board staff review of work products and key decisions, findings and conclusions

5. Commitments are Documented and Binding

- Formal written agreement with the Regional Board Executive Officer details commitments, milestones, schedules, funding and default clauses

- Agreement documents parties responsible for project management, stakeholder facilitation, technical review QA/QC management, analytical work, and reporting and resources committed to completion of each task.
- Letters from participating organizations authorizing persons to represent the views and interests of the organization.
- Dispute resolution procedures are identified in advance.

6. Assurance that Schedules will be Met

- Consequences for failure to meet schedules
- Mechanisms for schedule correction to meet final timelines
- Conditions that will result in overall default and revision to Regional Board lead.

Appendix A

Watershed Fact Sheets

Introduction

This appendix contains fact sheets for watersheds that will be addressed prior to 2008. The fact sheets list the Section 303(d) listed pollutants, the major point source dischargers and non-point sources, and the standards issues that have been identified to date for which the Regional Board Staff is proposing to review prior to or during TDML development, if any. In addition, the fact sheets summarize the technical approach, special studies that are underway in support of the TMDL, and the current status of stakeholder involvement.

Additionally, Regional Board staff has identified WQS issues that have been raised by stakeholders, but that there are no plans, at this time, to review.

December 10, 2002
Public Review Draft

DRAFT Malibu Creek TMDL Fact Sheet
Watershed Year 2003

Pollutants: Nutrients, Bacteria, Metals, Legacy Pesticides

Point Sources: Tapia Wastewater Reclamation Plant (NPDES No. CA0056014), Caltrans Stormwater permit (NPDES No. CAS000003), Los Angeles County MS-4 Stormwater permit (NPDES No. CAS004001)
Non-Point Sources: Septics, livestock, effluent spray irrigation, golf courses, ~~birds and~~ other wildlife.

Technical Approach:

- Under contract to USEPA, Tetra Tech performed modeling using HSPF for the creeks and Bathtub for the lakes and the Malibu Lagoon
- Under contract to the Regional Board, Southern California Coastal Water Research Project (SCCWRP) in conjunction with Heal the Bay performed diurnal Dissolved Oxygen Survey
- Under contract to the Regional Board, SCCWRP in conjunction with UC Santa Barbara performed algal surveys and is in the process of completing studies to determine limiting factors to excess algal growth within the watershed. Final report due June 2003.
- Under contract to the Regional Board, SCCWRP performing studies of nutrient flux in Malibu Lagoon sediments.

Potential Standards Issues:

- Numeric objectives to control algal impairment.
- Natural sources exclusion for bacteria resulting from birds and other wildlife.

Stakeholder Coordination:

- The Malibu Creek Watershed Council has been provided regular updates of TMDL development findings. State and EPA will continue to provide Regular updates to the Watershed Council.
- A joint State-EPA work shop will be conducted in early 2003, prior to EPA's establishment.

TMDLs to be completed out of cycle:

Pollutant	Reason
Nutrients	To be established by USEPA to meet 3/22/03 consent decree due date.
Bacteria	To be established by USEPA to meet 3/22/03 consent decree due date

DRAFT Marina del Rey TMDL Fact Sheet
Watershed Year 2003

Pollutants: Bacteria, Metals, Toxics (legacies organics), TBT

Point Sources: Los Angeles County MS-4 Stormwater Permit (NPDES No. CAS004001)
Non-Point Sources: Birds, pets, atmospheric deposition

Technical Approach:
Used a GIS-based pollutant loading model (PLOAD) to estimate storm-water loading of metals (zinc, copper, and lead) to the Marinas ' back basins.

Potential Standards Issues:

None

Stakeholder Coordination:

- Sampling conducted in coordination with the Los Angeles County Department of Public Works and the Los Angeles County Department of Beaches and Harbors for the metals and organics (toxics) TMDL.
- Development of a water quality improvement project by the Los Angeles County Department of Beaches and Harbors, the Los Angeles County Department of Public Works, and the Los Angeles County Department of Public Health, to reduce bacteria concentrations at Marina Beach. This project will assist in the implementation of the bacteria TMDL.
- Will conduct at least one workshop for interested parties prior to release of final draft TMDLs.

TMDLs to be completed out of cycle:

Pollutant	Reason
Bacteria	May complete Bacteria prior to completing other pollutants.

DRAFT Los Angeles River
Watershed Year 2004

Pollutants: Bacteria, Metals, Organics, Oil, Nutrients, and Trash

Point Sources: City of Los Angeles Tillman Wastewater Reclamation Plant (NPDES No. CA0056227), City of Los Angeles-Glendale Wastewater Reclamation Plant (NPDES No. CA0053953), City of Burbank Wastewater Reclamation Plant (NPDES No. CA0055531), Tapia Wastewater Reclamation Plant (NPDES No. CA0064271), Dominguez Hills Fuel Oil Facility (NPDES No. CA0052949), Rocketdyne Division-Santa Susana (NPDES No. CA0001309), Los Angeles County MS-4 Stormwater Permit (NPDES No. CAS004001), City of Long Beach Stormwater Permit (NPDES No. CAS004003), City of Los Angeles Zoo Griffith Park (NPDES No. CA0056545), Santa Anita Park (NPDES No. CA0064203)

Non-Point Sources: Griffith Park Equestrian Center, private horse keeping facilities, cemeteries, golf courses, nurseries, atmospheric deposition

Technical Approach: Use a dynamic one-dimensional flow model (EFDC) coupled with a water quality model (HSPF) .Modeling performed by Tetra Tech under USEPA contract. Dry weather sampling conducted in two comprehensive snapshot sampling events. Wet Weather source analysis conducted using land use runoff sampling that is used to model the watershed.

Potential Standards Issues:

- The Regional Board will evaluate the potential for providing a variance to the bacteria objectives for REC-1 Beneficial uses in engineered channels during swift water storm events on a region wide basis.
- The Regional Board will evaluate the appropriateness of REC-1 bacteria objectives in concrete lined channels that have little dry weather flow and that have no potential for body emersion.
- The Regional Board is working with the stakeholders to develop a water effects ratio for ammonia toxicity.
- Stakeholders have discussed the potential for conducting a Water Effects Ratio for metals in the watershed. At this time the Regional Board Staff has no plans to conduct this study.

Stakeholder Coordination:

- A Technical Advisory Group has been formed for the watershed and helped to develop the nutrient TMDL. This group is expected to continue to provide input into the future TMDLs for the watershed.
- Periodic updates have been given to the Los Angeles/San Gabriel Rivers Watershed Council and the Los Angeles County Stormwater Permit Executive Advisory Committee.

- City representatives from the Executive Advisory Committee have shown an interest in developing a Policy Advisory Group, but to date has not taken the initiative to form the group. Without further action by stakeholders the State plans to proceed as outlined in the previous two bullets.

TMDLs to be completed out of cycle:

Pollutant	Reason
Trash	Completed
Nutrients	Analytical work completed; will be sent out for public by January 2003.

December 10, 2002
Public Review Draft

DRAFT San Gabriel River Fact Sheets
Watershed Year 2004

Pollutants: Bacteria, Metals, Nutrients, Chloride, abnormal fish histology

Point Sources: Sanitation Districts of Los Angeles County Long Beach WWRP (NPDES No. CA0054119), Sanitation Districts of Los Angeles County Whittier Narrows WWRP (NPDES No. CA0053716), Sanitation Districts of Los Angeles County Los Coyotes WWRP (NPDES No. CA0054011), Sanitation Districts of Los Angeles County San Jose Creek WWRP (NPDES No. CA0053911), Sanitation Districts of Los Angeles County Pomona WWRP (NPDES No. CA0053619), Los Angles Department of Water and Power Haynes Generating Station (NPDES No. CA0000353), Santa Fe Springs Refinery (NPDES No. CA0057177), Alamitos Generating Station (NPDES No. CA0001139), Los Angeles County MS-4 Stormwater Permit (NPDES No. CAS004001), City of Long Beach Stormwater Permit (NPDES No. CAS004003)

Non-point Sources: Equestrian facilities, nurseries, golf courses

Technical Approach: Use a dynamic one-dimensional flow model (EFDC) coupled with a water quality model (HSPF). Modeling performed by Tetra Tech under USEPA contract. Dry-weather sampling conducted in a comprehensive snapshot sampling event, an additional sampling event likely to occur during the next dry season. Wet-weather source analysis is expected to be conducted using land use runoff sampling which will be used to model the watershed.

Potential Standards Issues:

- The Regional Board will evaluate the potential for providing a variance to the bathing standards in engineered channels during storm events on a region wide basis.
- The Regional Board will evaluate the appropriateness of bathing standards in concrete lined channels that have little dry weather flow and that have no potential for body emersion.
- The Regional Board is working with stakeholders to develop a water effects ratio for ammonia toxicity.
- Stakeholders have discussed the potential for conducting a Water Effects Ratio for metals in the watershed. At this time the Regional Board Staff has no plans to conduct this study.
- The Regional Board plans to evaluation of the cause of impairment and determine if other TMDLs will address the abnormal fish histology listing.
- Stakeholders have discussed the potential for conducting studies to evaluate the chloride standard in Coyote Creek. At this time the Regional Board Staff has no plans to conduct this study.

Stakeholder Coordination:

- A Technical Advisory Group has been formed for the watershed and helped to develop the nutrient TMDL. Sampling events and modeling are being facilitated by

the Southern California Coastal Water Research Project. Organizations particpating in this stakeholder organization include the Sanitation Districts of Los Angeles County, the Los Angeles/San Gabriel Rivers Watershed Council, Los Angeles County Department of Public Works, Friends of the San Gabriel River, and others. This group is expected to continue to provide input into the future TMDLs for the watershed.

- Periodic updates have been given to the Los Angeles/San Gabriel Rivers Watershed council and the Stormwater Permit Executive Advisory Committee.
- Initial meetings with Stakeholders on the development of a Policy Advisory Group have occurred.

TMDLs to be completed out of cycle:

Pollutant	Reason
Abnormal Fish Histology	Evaluation of the cause of impairment and determine if other TMDLs will address.
Nutrients	Analytical work in progress will be completed in 2003.

Draft Santa Clara River TMDL Fact Sheet
Watershed Year 2005

Pollutants: Bacteria, Nutrients, Chloride, Salts, Legacy Pesticides

Point Sources: Sanitation Districts of Los Angeles County Valencia WWRP (NPDES No. CA0054216), Sanitation Districts of Los Angeles County Saugus WWRP (NPDES No. CA0054313), City of Fillmore WWTP (NPDES No. CA0059021), City of Santa Paula WWRP (NPDES No. CA0054224), Ventura WWRP (NPDES No. CA53651), Los Angeles County MS-4 Stormwater permit (NPDES No. CAS004001)

Non-point Sources: Agriculture, atmospheric deposition

Technical Approach:
Use the WARMF model with existing data for Nutrients. No additional sampling conducted for TMDL development.

Potential Standards Issues:

- Nitrogen standard based on existing WQS which changed from an average to instantaneous maximum in 1994. May not be protective with respect to algal blooms.
- The Regional Board is working with stakeholders to develop a water effects ratio for ammonia toxicity.
- Evaluation of the chloride standard in included in recently adopted TMDL as part of implementation plan.

Stakeholder Coordination:

- A Technical Advisory/Policy Advisory Group has been formed for the watershed and helped to develop the nutrient TMDL. The group is facilitated by Arturo Keller from UC Santa Barbara. Organizations participating in the group include the Sanitation Districts of Los Angeles County, the Friends of the Santa Clara River, Newhall Ranch and Farming, and others).
- It is unclear if this group will continue to provide input into the future TMDLs for the watershed. If not, the state will periodically convene stakeholder meetings to update stakeholders on the progress of TMDL development.

TMDLs to be completed out of cycle:

Pollutant	Reason
Chloride	TMDL was adopted by the Regional Board in October 2002..
Nutrients	Analytical work in progress will be completed in 2003. Implementation work is already in progress.

December 10, 2002
Public Review Draft

DRAFT Ballona Creek TMDL Fact Sheets
Watershed Year 2005

Pollutants: Bacteria, Organics, Metals, and Exotic Vegetation

Point Sources: Los Angeles County MS-4 Stormwater permit (NPDES No. CAS004001)

Non-Point Sources: Birds, atmospheric deposition, pets

Technical Approach: Use EFDC and HSPF to model the creek.
Wet-weather source analysis is expected to be conducted using land use runoff sampling which will be used to model the watershed.

Potential Standards Issues:

- The Regional Board will evaluate the potential for providing a variance to the bathing standards in engineered channels during storm events on a region wide basis.
- The Regional Board is in the process of evaluating the appropriateness of bathing standards in concrete lined channels that have little dry weather flow and that have no potential for body emersion. .
- Stakeholders have discussed the potential for conducting a Water Effects Ratio for metals in the watershed. At this time the Regional Board Staff has no plans to conduct this study.

Stakeholder Coordination:

- The Ballona Creek Watershed Task Force was recently formed, and one of its stated objectives is to facilitate the development of future TMDLs.
- The state is periodically updating and receiving input from the watershed group. This level of coordination is expected to continue.
- Regional Board staff are working with the Santa Monica Bay Restoration Project, the County of Los Angeles, the City of Los Angeles, the City of Beverly Hills, and Culver City in a Clean Beaches Initiative Project to evaluate urban runoff BMP treatment train efficacy.
- A minimum of four updates will be provided to the Watershed Task Force during TMDL development.

TMDLs to be completed out of cycle:

Pollutant	Reason
Bacteria	Substantial work has been completed on the TMDL had will be completed in 2003.
Exotic Vegetation	Further evaluation on the impairment needs to be conducted.

DRAFT Calleguas Creek TMDL Fact Sheet
Watershed Year 2006

Pollutants: OP Pesticides, Nutrients, Chloride, Salts, Legacy Pesticides, and Metals

Point Sources: Simi Valley WWRP (NPDES No. CA0055221), City of Moorpark WWTP (NPDES No. CA0063274), City of Thousand Oaks Hill Canyon WWRP (NPDES No. CA0056294), City of Thousand Oaks Olsen Road WWRP (NPDES No. CA0056359), Camarillo Sanitation District WWRP (NPDES No. CA0053597), Camrosa WWRP (NPDES No. CA0050501)

Nonpoint Sources: Agriculture, septics, horsekeeping facilities, birds.

Technical Approach:
Chloride and nutrients completed with mass balance model using data from watershed characterization study.
Technical approach has not been proposed to date for other pollutants.

Potential Standards Issues:
- The stakeholders have talked about the need for water effects ratio for ammonia, but to date, no study has been conducted.
- Evaluation of the chloride standard in included in recently adopted TMDL as part of implementation plan.
- Stakeholders have discussed the potential for conducting a Water Effects Ratio for metals in the watershed. At this time the Regional Board Staff has no plans to conduct this study.

Stakeholder Coordination:
- The Calleguas Creek Watershed Management Committee is proposing to conduct stakeholder led WQS and TMDL studies.

TMDLs to be completed out of cycle:

Pollutant	Reason
Chloride	Established by USEPA March 2002
Nutrients	Adopted by Regional Board October 2002.

December 10, 2002
Public Review Draft

DRAFT McGrath Beach TMDL Fact Sheet
Watershed Year 2003

Pollutants: Bacteria, beach closures.

Point Sources: McGrath Lake discharge, Reliant Energy Mandalay Generating Station Discharge NPDES Permit No. CA0001180, CI No. 2093

Non-Point Sources: Santa Clara River Estuary, birds and other wildlife.

Technical Approach:
- Under a grant from the Regional Board, the McGrath State Beach Area Trustee Council (Trustee Council) will study data gaps for the McGrath Lake Watershed.
- Use a vertically integrated 2-D model (WQM).

Potential Standards Issues:

None

Stakeholder Coordination:
- The McGrath Lake Watershed Action Committee (McGrath WAC) has been provided regular updates of TMDL development findings.
- The Trustee Council are frequent attendees of the McGrath WAC meetings.
- Three general meetings have been held with the public on the McGrath Beach Pathogen TMDL.

TMDLs to be completed out of cycle:

Pollutant	Reason
Bacteria, beach closures	Technical work on TMDL completed. Will be released for public review in December.

DRAFT

DRAFT Dominguez Channel, Los Angeles Harbor Watershed
Watershed Year 2007

Pollutants:
Bacteria, metals, nutrients, pesticides, PAHs, toxicity, and trash

Point Sources:
Several oil refineries, NPDES permittees, Los Angeles County MS-4 Stormwater Permit (NPDES No. CAS004001)

Other permit numbers:

Company Name	NPDES No.	CI No.
Atlantic Richfield Company	CA0000680	68-006
Equilon Enterprises, LLC	CA0000809	85-019
Equilon Enterprises, LLC	CA0003778	68-010
LA City Bureau of Sanitation	CA0053856	58-025
Long Beach, City of	CAS004003	
Long Beach Generation, LLC	CA0001171	
Los Angeles City of DWP	CA0000361	58-081
Mobil Oil Corp.	CA0055387	85-007
Tosco Corp.	CA0063185	
Tosco Corp.	CA0000035	57-184
Tutor-Saliba Team	CA0064351	

Non-Point Sources:
California State University, Dominguez Hills, birds and other wildlife, domestic animals, atmospheric deposition

Technical Approach:
A two dimensional water quality model (HSPF) will be used by Regional Board Staff. Modeling will also be performed by Lawrence Berkeley Laboratory under US DOE contract.

Potential Standards Issues:

- The Regional Board will evaluate the potential for providing a variance to the bacteria objectives for REC-1 Beneficial uses in engineered channels during swift water storm events on a region wide basis.
- The Regional Board will evaluate the appropriateness of REC-1 bacteria objectives in concrete lined channels that have little dry weather flow and that have no potential for body emersion.
- Stakeholders have discussed the potential for conducting a Water Effects Ratio for metals in the watershed. At this time the Regional Board Staff has no plans to conduct this study.

Stakeholder Coordination:

- Regional Board staff have provided updates to the Dominguez Channel Watershed Action Committee (DWAC), a stakeholder group.

- At a minimum, four informational workshops will be held with the Dominguez Channel Watershed Action Committee during TMDL development.

TMDLs to be completed out of cycle:

Pollutant	Reason
Bacteria	No date set by Consent Decree. Staff currently working on the TMDL, expected completion in 2003.
Bacteria Los Angeles Harbor	EPA to establish in 2005